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INTEMPERANCE IN NEW ENGLAND. HOW SHALL WE TREAT IT?

BY HENRY I. BOWDITCH, M.D. Read before the Boston Society for Medical Observation, Feb. 19, 1872.

AT a recent meeting, I laid before the Society a chart illustrative of certain cosmic and social laws regulating the prevalence of intemperance over the globe. I was enabled to prepare that chart after carefully analyzing the statements contained in a correspondence that had been carried on between the Massachusetts State Board of Health and many persons (American ministers and consuls accredited to and resident in foreign countries, and some private persons of well-known ability), upon the all-important question of the use and abuse of alcoholic drinks. The correspondence was published in the last year's report of the State Board of Health of Massachusetts.

While preparing the chart, I had frequent conversations with the Chief of the Police of Boston and with others upon the working of the Prohibitory and License laws in New England. I then received some rather significant facts from this city, and as they will illustrate the apparently imperfect influence hitherto produced by legislation upon the prevalence of the vice of intemperance, at least in a large city like Boston, I propose to speak of them in continuation of my previous communication. I am well aware that, strictly, according to our rules the subject should not be presented in this form to the Society. But the subject is of so much importance, and intemperance is so constantly thwarting the physician in his treatment of disease, that any paper having for its object the mitigation of this great evil can be never wholly out of order in any medical society.

There are thousands in New England who have an abhorrence of intoxication, and yet they do not assent to the doctrines of either of the great parties now contending for total abstinence or its extreme reverse, the general free sale and use, as a beverage, of *every kind* of intoxicating drink. These persons ask of both parties what they can do to stem the torrent of intemperance; and they get little satisfaction from either. I cannot hope to do much toward a better solution of the problem, but I propose to lay before the Society facts above alluded to, which were given me by the Chief of the Police of Boston. Afterwards I shall give some general views as to the position which, I think, this community should take upon the whole subject of intemperance in New England. We need, I think, some law to restrain unscrupulous men from selling all kinds of liquor to all persons, but we must have laws that can be thoroughly executed, not only in small towns and over a sparsely scattered population, but which will have a benign influence over our large cities. Hitherto we have not arrived at this desirable end; for, notwithstanding all efforts, whether by total abstinence or license laws, drunkenness has increased, at least among the lower classes, in the large centres of business. In proof of the truth of this statement, let us look candidly at documentary evidence, and evidence which cannot be gainsaid. The Chief of the Police in this city writes in his last report the following words:—

"In looking over the comparative table of crime, one fact presents itself to the mind with peculiar force, and that is the alarming increase of the number of arrests for drunkenness." Of the 400,000 arrests during the last seventeen years, 225,000 were for drunkenness, besides some 28,000 "helped home for drunkenness," to say nothing of the 23,000 "assaults." "But the most startling feature is the steady increase of intemperance compared with the increase of the population." "Intemperance has increased in fourteen years one hundred and seventy-five per cent. in spite of law." In connection with this, it may be stated that I have seen tables prepared under the direction of chief of police, and from returns made by his subordinates, which indicate

that the percentage of drunkenness and crime consequent on drunkenness was very large during the years 1861, '62 and '63, the first three years of the late war. During 1863 it was higher than in any year before or since that time. In general, it may be broadly stated that in 1854 the percentage to the whole population of those "helped home drunk," "arrested for drunkenness," or of "disturbances suppressed," almost all of which arose from intemperance, was 6·94; in 1863, it was 15·42, and in 1870, it was 12·01.

Again, it is a singular coincidence, to say the least, that in July, 1868, when the license law was in operation, there were *less arrests for drunkenness* than were made during either of the forty-eight months of the four years beginning Jan. 1866, and ending Dec. 31, 1869.* By dividing the months of the four years into classes, according to the prevalence of prohibition or of license law, we gain curiously significant and almost inexplicable results on taking the percentage of arrests for drunkenness to the whole population of the different years, which results are more clearly seen by the following table:—

Total number of Arrests for Drunkenness in Boston from June 1 to May 31, inclusive.

	Arrests.	Population.	Percent.	Law in force.
1866-7	5819	194,422	2.99	Prohibition.
1867-8	6085	196,654	3 09	Do.
1868-9	6817	230,988	2·95	License.
Last six months of 1869	4889	234,483	4·17	Prohibition.†

In other words, it seems to be a fact that, during the years when the license law prevailed, there were fewer arrests for drunkenness than previously under the prohibition law—and very much fewer than during the subsequent six months when prohibition was again in operation, with cider, it is true, allowed under certain restrictions. It is but right, however, to state that the annexation of Roxbury in 1868, whereby a large population, much of it rural, was added to the city, may have tended to lessen the percentage of that year.

While, therefore, it seems that neither prohibition nor license has had any real influence towards stemming this strong current of intemperance in Boston—still, in the estimation of many, a good effect has been produced in some of the smaller towns of the State, where the people have, by vote, decided that no liquor shall be sold. Such towns have occasionally become real asylums for the salvation of drunkards, who have risen to a proper self-respect and have determined to give up the use of intoxicating drinks, but fear that they cannot withstand the temptations of a large city. Judge Pitman, in his letter accepting a nomination for the office of Governor, states that to a certain degree similar results have been arrived at in New Bedford. But even there, from all that I can learn, there are many secret ways, whereby liquor can be obtained by those who wish it. There are no *open* bars, but it cannot, I think, be denied that there are *secret* ones in that city.* Again, in some towns, where there are large manufacturing establishments, and in which there are foreigners working, the same results occur. In some towns, the citizens have voted to sustain the Prohibitory law in its entireness and in town meeting have decided not to allow any liquor to be sold; nevertheless, in these very places it can be bought at every corner. For example, in two of the medium-sized townships of New England, intelligent physicians, long residents therein, and both of whom deeply deplored the existence of intemperance, told me a short time ago that drunkenness was never more rife than when, apparently, the Prohibitory law was in full force. One of them related this as an undoubted fact. In the other town another informant told me that apothecaries who, *a few years ago*, were prosecuted when selling, as they believed, for medicinal purposes and with the most honest intent, could *now* sell as they pleased, even under the "*enforcement*"(!) of the Prohibitory law. I say enforcement, but as above stated, although the citizens of the town have voted that the law should be enforced, the selectmen do not in fact carry out that public vote, and the mass of the citizens *virtually* say "Amen."

Surely, there never was a greater attempt of a whole people to hoodwink itself, as it were. Such promulgation of law, and at the same time such utter and open, daily and, I might say, hourly contempt for it, tend to lower the political morality of each citizen consenting thereto, to corrupt the whole community, and, in fact, to bring *all* law into less repute among the masses of

* The Chief of Police informs me that, strictly speaking, until September, when licenses were first given out, there was neither prohibition nor license law in operation. The police, however, acted always under the same orders.

† Except cider under restrictions.

* Correspondents in whose honor and truthfulness and means of information I have entire faith, assure me of this being a true statement of matters at New Bedford.

the people. Nothing, surely, can be more fatal to the best interest of a republic than such a state of things, however caused.

The following fact also illustrates the results of prohibition in a large city:—

A gentleman, intimately connected with a large pauper hospital, informs me that whereas many were formerly brought in drunk, in consequence of liquor bought and used at the dram-shop, quite as many, if not more drunkards are brought in now, while prohibition is in force, but that each man has his own whiskey-bottle in his coat-pocket.

During a recent professional visit which I made to the eastern part of Maine, I asked of many persons at some stations where the train was stopped, and the uniform answer given was, "Liquor can always be obtained by any one who wishes for it." At one, at least, of the stations, ale was openly sold at open bars. One informant stated, while admitting the fact of the utter disrespect paid to the law, that he thought, although it was violated everywhere, the people would never grant a License law. I believe many thoughtful persons agree with him. Some claim, and, as I think, justly, that the State has no right to license, for money, the perpetration of any vice. To "*license*" one to sell all kinds of liquor is virtually licensing to do what will promote intemperance, that is increase a gross vice.

Thus we may say that, although in New England the law appears to be enforced in some places with tolerable success, so far as the open sale is concerned, it is not enforced at all in others. I doubt if anyone will contend that it prevents anywhere the obtaining of liquor by those who are determined to have it Meanwhile, as we learn from Boston that when there was the least law there were least arrests for drunkenness, and when some relaxation of the law allowed the use of milder liquors there was less intoxication than before, we have a right to ask whether similar results would not follow further relaxation, and whether the permission to sell light ales and beer, and light wines would not, under certain very general rules, really be a promotion of temperance.

As the Prohibitory law has thus failed of success, because the people do not sustain it, and, moreover, as no License law for the sale of liquor, has, as yet, commended itself to our citizens as being the best course possible, it remains to be seen whether some better plan may not be devised. I feel sure that the only foundation for our course in this matter is in as profound a study as we can make of the natural laws of the propagation of intoxication throughout the globe. That investigation I have made elsewhere as I have already hinted.*

Generally it may be stated that from letters received from several correspondents resident in foreign countries, already alluded to in the beginning of this paper, I have been able to present some proof of the existence of great cosmic and social laws governing the vice of intemperance. The result of my investigations and my thoughts upon the subject may be summarily stated in the following propositions:—

First. Stimulants of some kind are found to exist and to be used at times to excess in every quarter of the globe.† To use stimulants, therefore, seems to be one of the strongest of human instincts. As such it cannot be prohibited, any more than we can annihilate any other instinct. We can only curb it by reason or by law, if it transgresses the bounds of social life.

Second. Intemperance is very rare between the isothermal lines of 77° F. north, and south of the equatorial isothermal line of 82.4. It gradually increases on going northward (and southward probably), between 77 N. and S. and 50° isothermal lines, which is the area for the natural growth of the grapevine. It becomes very rife above 50°, and, moreover, it is of a coarser, more brutal character than in either of the two previously named areas.

Third. Intemperance produces little or no crime at the equatorial area, rarely in the middle area; whereas it is the great provocative of crime above 50 F.

Fourth. Race has immense influence on the prevalence of intemperance. For example, the English race has entailed on this nation the incubus of two centuries of drunkenness, inherited from one generation to another. England now overshadows Ceylon in the tropics, and Australia in the grape region, with these same habits, thus overriding all climatic law, at least for a time, till reason and conscience and wise laws can restrain it.

Fifth. In Europe and in the other grape-growing areas of the earth, mild wines are used freely from babyhood to old age, and they do not seem to produce a nation of drunkards.

Sixth.—Similar remarks may be made on lager beer and its effects.

* Vide Third Report of the State Board of Health. Boston. 1872.

† It is true that Commodore Wilkes states that he did find one set of savages which had no stimulating drink.

Seventh. On the contrary, ardent spirits dwarf intellectually, morally and physically the nation that uses them to excess.

Eighth. Hence we should not classify all liquors as equally prejudicial to man. On the contrary, admitting a human instinct, we should allow the reasonable and free use of some stimulants and discourage the use of others.

Ninth. We should in this country cultivate everywhere the grapevine and permit the use of lager bier. We should open our ports to a free trade in mild, "unfortified" European wines, at least until we can make sufficient of our own to satisfy the necessities of our people.

Tenth. We should do everything we can to restrain the use of ardent spirits as a beverage, by moral suasion and if need be by stringent law. We should close "grog-shops."

Eleventh. Moral suasion and education in the horrors of intemperance, too much neglected of late, I fear, in our pursuit of law as a prevention of intemperance, should be inculcated.

Twelfth. Inebriate asylums should be established for the reformation of dipsomaniacs, and repeated drunkenness should be punished as a crime.

Thirteenth. The seller of liquor to a known drunkard should be signally punished, and the offender should be made to pay the expenses of crimes or injuries resulting from the intemperance of his victim.

Fourteenth. All adulterations of liquor should be punished signally and promptly as a high crime against society.

Fifteenth, and finally, it would be the greatest blessing to this community if by large coöperative work by capitalists, Holly Tree Coffee Houses could be everywhere opened. In these good food and good coffee and tea could be prepared cheaply for the people. These could be placed side by side by the two thousand grog-shops that now disgrace our city. Our correspondence proves that a great gain for temperance would be the result of such a movement.

A FATAL CASE OF OTORRHŒA.

By Geo. W. Gay, M.D.

Mrs. X., æt. 33, had scarlet fever when a child; this was followed by a purulent discharge from the right ear. With the exception of an occasional abscess in this ear, she has enjoyed fair health till the summer of 1870, when, soon after the sudden death of her only child, she began to have sleepless nights, and violent headaches, of a supposed neuralgic character. She was very melancholy, and in the early autumn the headaches became almost constant. She was in her fourth pregnancy. Her strength and appetite were poor and her spirits unusually depressed.

Dec. 27th.—I was called, and found her suffering from an ordinary attack of acute gastric catarrh. Nausea, vomiting, and a severe headache confined to the right side. Pulse, 70; no fever. Could not lie on right side, as headache was made worse. Had a blister behind right ear. She took small doses of bicarbonate of soda and oxalate of cerium for nausea and vomiting; had hot applications to head, and bromide of potassium at night.

Dec. 28th, evening.—Passed a restless night. Had a severe throbbing pain in right ear this A.M.; easier now. External meatus red, swollen and very sensitive to the touch. Can lie on right side. Nausea and vomiting subsiding. Sat up and had her bed made to-day. ℞ Quin. sulph. gr. j. 4 t. d. Liquid diet and bromide of potassium at night.

Dec. 29th.—Slept fairly. Pain extending all over head. Appetite increasing. Bowels constipated. Citrate of magnesia.

Dec. 31st.—Pretty comfortable till last night, when she had severe pain along right side of lower jaw; not much pain in ear. Pulse, 88; thirsty; stomach quiet. Beef-tea and wine.

Jan. 2d, 1871.—Had a good day yesterday and a comfortable night, but pain came on in right ear again this morning. She is chilly at times, and sweats some when asleep. Pulse 100, and of good strength. This P.M., she became excited by bad news, and pain in the ear became worse than ever; much relieved by chloral. Does not feel as strong as she did yesterday. Motions of fœtus active. Cold applications to head, and heat to feet. Stop quinine, as it seems to increase the headache.

Jan. 4th.—Has been afraid to take opiates on account of the nausea and headache, which have always followed their use, but yesterday morning she was persuaded to take an eighth of a grain of sulphate of morphia with one grain of oxalate of cerium, and she had an excellent day and night. This morning the headache began again, and the pain was most severe in occipital region. A slight purulent discharge made its first appearance from right ear to-day. Had a severe chill this P.M., followed by sweating and prostration. Syringe ear

with a warm and weak solution of carbolic acid. Morph. sulph. p. r. n.

Jan. 6th.—Headache for past twenty-four hours has been much relieved by leeches to temples, followed by fomentations. Slept well last night. Pulse 100; some fever; skin hot, especially in palms of hands and soles of feet. No chills. Morphia, given when chills threaten, seems to modify and occasionally to entirely prevent them. Takes food and stimulants well. Bromide of potassium and ammonium at night.

Jan. 7th.—A little excitement this A.M. was followed by a severe chill. Quin. sulph. gr. j. every two hours. Milk, ice cream and wine.

Jan. 10th.—Has been fairly comfortable to-day. Pulse 110. Great prostration. Begins to complain of sore throat and difficulty in swallowing. Tongue dry, with a white, cheesy coat. Abdomen tympanitic. Uterus quiet. No motion of child felt for several days. Enema infusion of assafœtida. Ice to eat. Instead of wine, to have brandy and aromatic spts. ammonia.

Jan. 12th.—Easier yesterday, with pulse at 100. To-day, pulse 112. Prostration severe. Mouth and throat sore. Tonsils and adjacent parts red and swollen. Muscles of neck stiff and sore, but there is no swelling externally. No chills for some days till this morning. Slight cough, with frothy sputa. No physical signs of trouble in chest. Headache moderate and not confined to any part. There is still a slight fœtid discharge from right ear. No tympanitis. Continue food and stimulants.

Jan. 14th.—Pulse 108 in the morning, 120 this evening, and intermittent for the first time. Resp. 26 to 36. Was unconscious for a short time this P.M., but now is bright and hopeful No delirium or convulsions. Pupils contracted and sluggish. Comfortable—requires an opiate twice, daily.

Jan. 15th.—Pulse 108, fair strength. Respiration 20. At midnight, was attacked with a sharp pain in right shoulder, relieved by morphia. This pain came again this P.M., and electricity was tried without effect. No chills. Throat not so sore.

Jan. 17th.—Comfortable yesterday, but to-day began with a severe chill. She is exceedingly "tired" and restless. Whole body very sensitive to the touch. Palms and soles hot and dry, almost burning, and required constant bathing. Mouth and throat dry, and covered with aphthæ. Can open mouth to only about one-third the natural extent. Neck still sore and stiff. Headache mostly confined to occiput.

Jan. 18th.—Pulse 96 to 102; intermittent. Resp. normal; two chills last night, none to-day; there were indications of one, but a hypodermic injection of morphia and a whiff or two of ether quieted her. There is a hard, ill-defined swelling over right sterno-mastoid. No œdema or fluctuation. No more tenderness than over any part of head or neck. No swelling or tenderness over mastoid process. Can neither move her head nor allow it to be moved without great pain. Mouth and throat better. Restlessness is extremely severe when not under the influence of opiates. Headache better.

Jan. 19th.—Good night. Pulse 100. Temp. 102°. Tongue clean. Chill this morning. Dr. E. H. Clarke, called in consultation, suggested iod. potas. grs. v. t. d., and hydrarg. bichlor. gr. 1-30 t. d. Takes ice cream, brandy and beef-tea pretty well.

Jan. 20th.—Delivered, this morning, of a six months child, which showed slight signs of life. Labor lasted about two hours. Uterus contracted well. No hæmorrhage. Has had the most comfortable day she has seen for a month; none of that terrible restlessness which has troubled her so much. Pulse ranges from 100 to 120. Can open her mouth better, and takes more nourishment. Ear discharges a little occasionally; no pain in it. There is some muttering delirium at times. No paralysis or convulsions. Pupils alike, contracted, and slow to the stimulus of light; moderate photophobia. Sleeps considerably, and is refreshed by it.

Jan. 21st.—At 1, A.M., the old unrest came back again, worse than ever. Pulse 120 and weak; skin hot and burning; greatly relieved by olive oil inunctions. Lochia natural. To inhale chloroform occasionally when very uneasy.

Jan. 22d.—Much worse. Semi-conscious most of the time. Resp. moaning. She complains of pain all over body when roused, and especially on right side of head. No pain in ear for several days. Head drawn to right side. Right eye projects about a line; lid œdematous. Pupils same as usual. Kept quiet with chloroform.

Jan. 23d.—All the above symptoms aggravated. Groaning and screaming continually, when not under the chloroform. Takes stimulants and nourishment fairly.

Jan. 24th.—Conscious and comfortable for a short time this morning, then came the restlessness and pain as severe as ever, and she was kept under chloroform the remainder of her life. She died at 2., P.M., Jan. 24th, thirty days after taking to her

bed. There was no paralysis of motion or sensation, during her sickness, nor were there any convulsions. Dr. L. Richmond, of Derby Line, Vt., was with her constantly during the last two weeks of her life, and almost everything was tried which promised even temporary comfort. Opium and chloroform were her best friends. Chloral, bromide of potassium, belladonna, conium, cannabis indica, valerian and many other drugs were tried with very little benefit. There was no autopsy.

TWO CASES OF EXTRACTION OF A CYSTICERCUS FROM THE HUMAN EYE.

Shown at the Berlin Medical Society, Nov. 22, 1871, by Dr. J. HIRSCHBERG. Translated for the JOURNAL, by B. JOY JEFFRIES, M.D., from Virchow's Archiv, 1871.

THE first case was interesting from the difficulty in operating, the second from the complete success of the operation. In the former the worm was deep in the vitreous, in the latter in the anterior chamber.

In the first part of November, 1871, a woman, 23 years old, applied to me. She was healthy and sound otherwise than that for the last year she had suffered from some defect of vision of the right eye, which at present allowed only fingers to be counted with difficulty at a short distance. The globe was unaltered, and in the still transparent vitreous I found a large, quite active cysticercus. As we know, such an eye must be lost, and there is even danger of sympathetic trouble in the other.* Thrice I have been forced to enucleate an eye holding a cysticercus, and thus had opportunity of demonstrating the anatomical changes produced by the parasite; and I have expressed the opinion that in all these cases, *when advanced*, this operation was preferable to attempts at extraction. In my present case, however, the conditions seemed sufficiently favorable, and the retention of the form and shape of the globe so important for the woman, still young, that I decided on extraction according to Graefe's plan.

The patient was lying, without anæsthetic, on the bed. I made the lower sclerotic section as if for cataract extraction, then did an iridectomy, opened the anterior capsule largely and evacuated the perfectly transparent crystalline fully and slowly. (Upon the last great stress should be laid.) I then let the patient sit up, and entered the vitreous with a little hook by which I drew, with great difficulty, the worm in its surrounding membrane forwards till it was seen by the eye. The patient's head was now bent downward whilst I depressed the edge of the wound, when the entozoon slipped out. The wound healed *prima intentione*. Now, on the thirteenth day, the eye is perfectly quiet and its form completely retained.

The second case is in a certain way important in reference to the topographical seat of the cysticercus. The presence of the worm between the lamellæ of the cornea was stated by Appia, based on a briefly related observation.* This, however, was doubted by competent authors.† My observation shows how an intra-lamellar (corneal) position of the worm may be simulated, when the animal, living free in the aqueous humor, occasionally fastens itself to the cornea. It is of interest also to notice that both parasite and host were relatively young—the former twelve weeks and the latter two years.‡ (Comparing the size of the entozoon in this and the former case with the sizes given in my previous accounts, and we shall get an approximate idea of the relations of growth of the cysticercus in the human eye.)

In March, 1871, a small boy was brought to my clinic who had suffered from inflammation of the left eye for three months. The mother had noticed a white spot upon it for the last four weeks. The eye was unaltered in size and shape, but showed marked pericorneal injection, as in severe iritis, a disease as we know that scarcely occurs spontaneously at so early an age. The cornea was clear and its anterior surface regular. In its centre was a grayish spot of about 1‴ diameter, which lateral illumination showed to be a delicate spherical vesicle with central white spot. In front of it was certainly a thick layer of corneal tissue; whether a thinner layer also was behind it, could not at once be decided. The aqueous humor was muddy, the pupil small and still undilated three quarters of an hour after instillation of a solution of atropine. I attempted at once to extract the worm under chloroform. On

* Compare this Archiv xlv. Also Knapp and Moos, Arch. for Eye and Ear, i. and ii. Also, Sitzung. bericht. berl. Med. Gesellschaft.

* Archives d'Ophtalmologie, par Jamain, July and August, 1853.

† Zehender's Handbuch, i. 228, Note 2. Weckers, Book i., 453. Appia's idea would not tally with the theory that the cysticercus germ reached the inside of the eye through the circulation. Compare the author's *resumé* of the literature of this subject in the Wiener Medic. Rundschau, Jan., 1870.

‡ Graefe's Archiv., 12, 2, 174. He found in his 80 cases of intra-ocular cysticercus (among 80,000 patients) that the youngest host was 8 years old. I extracted a cysticercus from the lower lid of a child 3 years old. Berl. Klin. Wochenschrift, 1870.

applying the speculum, the worm changed its place and moved free in the aqueous chamber. Instead, therefore, of removing the anterior lamella of the cornea as I had intended, I made a linear cut below with a lance-knife in the cornea, and removed the neat little cysticercus, which at once projected its head-piece. With pressure bandage and atropine the wound healed in two days, and the eye showed no irritation. Vision is now at any rate (Nov. 22, 1871) normal. A slight anterior synechia next the unimportant scar is all that remains.

Often as the cysticercus is with us found inside of the human eyeball,* yet curiously enough it is rarely seen in the anterior chamber. Graefe saw only three cases, and the number of successful extractions has, since Schott's noted communication, remained very small. Yet these cases are of great therapeutic value, since the eye, which otherwise is sure to be lost, may, by a simple operation done at the right time, be saved with certainty.

Reports of Medical Societies.

BOSTON SOCIETY OF MEDICAL SCIENCES.

EDWARD WIGGLESWORTH, JR., M.D., SECRETARY.

DEC. 26th, 1871.—The Society met at the house of Dr. Dwight, Dr. White in the chair.

Effects of Administration of Hydrocyanic Acid.—Dr. Amory read a paper to show that death from prussic acid intoxication was due to some other cause than simply paralysis of the muscles concerned in respiration, and suggested that this active poison produced some change in the physical character of the blood, whereby the vital functions could not be maintained.

This he proved by certain experiments in which the process of artificial respiration was continued until after the cessation of the heart's pulsation. He also called attention to the fact that the pathological appearance after death was different in those animals poisoned by prussic acid if artificial respiration was thus maintained. He noticed, also, that rigor mortis did not occur so soon after death in those animals poisoned by prussic acid, in whom artificial respiration was used, as in those animals in whom no artificial respiration was used. In this connection, Tardieu was quoted as affirming that rigor mortis occurred very soon after death in animals and men dying from a poisonous dose of prussic acid.

The details of these experiments were as follows:—

EXP. I.—Administration of acid. hydrocyan. dil.* (U. S.)—gtt. xv., or about a grain of the anhydrous acid—to a dog (20 lbs. weight), subcutaneously; artificial respiration; death; *without ether.*

After tracheotomy, a flexible tube was inserted in the trachea of a dog, and the above dose then introduced under the skin on the inside of left thigh. In half a minute afterwards, symptoms of prussic acid intoxication, such as embarrassed respiration and muscular twitchings, were observed. Artificial respiration† was immediately instituted and maintained eighteen to twenty times a minute. During the next half hour slight symptoms of muscular spasms were observed only twice, and were entirely relieved by more rapid movements of the bellows. There was no dilatation of pupil nor protrusion of eyeball. Surface of skin grew gradually cooler, the cardiac pulsations weaker and more frequent, and sounds of coarse mucous râles became quite distinct. As soon as the cardiac pulsations became imperceptible (in about 22 minutes), the thorax was opened, and the right lung found contracting and expanding in accordance with each movement of the bellows. The left lung did not fully expand, for the tracheal tube had been pushed down below the bifurcation, thus giving air mostly to the right lung.

Post-mortem Appearances.—Ecchymotic spots quite marked in left pulmonary tissue, and but slightly on right side, and this only in the posterior portion. (The dog had been lying upon the back.) As soon as the artificial respiration was discontinued, the ecchymosis gradually increased. The walls of heart were relaxed, and the right ventricle contained dark fluid blood, the left ventricle bright arterial blood; both auricles contained blood. The blood which oozed from cut pulmonary tissue was bright red. The lower and posterior portions of left lung were slightly œdematous. The calvaria and the vessels in the superficial membranes were slightly injected with blood; in some this was dark venous, in others bright red.

No muscular rigidity occurred during three hours after death, and the body was then thrown away. This peculiarity of the

* Graefe in his Archive, xii., 2, 174.
† Hirschler, Arch. f. Ophth., iv., 1, 113.

* Should contain two per cent. of anhydrous acid.
† With machine for the purpose.

early appearance of rigor mortis after death from prussic acid intoxication has been particularly mentioned by M. Tardieu.

Exp. II.—Dog (30 lbs.); hydrocyanic acid dil. (U. S.) gtt. xv.; artificial respiration; *post-mortem* muscular contractility and nervous conductibility from the stimulus of induced current of electricity.

Tracheotomy, performed under the influence of chloroform and ether. As soon as the dog showed the first symptom of recovery from etherization, hydrocyanic acid dil. (U. S.) ℥ss was injected under the skin of the inside of the thigh. In less than a minute, signs of embarrassed respiration were observed, and as soon as these become quite marked, the artificial respiration by apparatus was commenced and continued for twenty-five minutes. At the end of twenty minutes from the moment of injection of the drug, the pulsations of the heart could not be distinguished; the thorax was then opened; the heart was flaccid and still, the right auricle and right ventricle both were filled with dark blood, as well as the superior and inferior venæ cavæ; the pulmonary veins, the left auricle and the left ventricle were all filled with light red blood. During the continuation of artificial respiration, and while the thorax was opened, the lungs were light pink while inflating, and pale while expelling air. At the end of twenty-five minutes from moment of injection, and five minutes after cessation of cardiac pulsations, the induced current of electricity was applied with one pole at the base and the other at apex of the heart. This was followed by irregular contractions and dilatations of both ventricles, and the rapid and systematic contraction of the left auricle, which continued for a moment after the removal of the electrodes. On again being applied, electricity was followed by the same movements, and this response continued for about twenty minutes, gradually becoming weaker and weaker. The contractility of the muscles could be excited for over an hour and a half after the thorax was opened, either when the electric stimulation was applied to nerves isolated on glass rods or to the muscular tissue itself. The liver was accidentally cut, and from it flowed dark venous blood in large quantity; and this blood on exposure to the air became bright red, and yet did not coagulate easily, though when the ventricles were cut open the right ventricle contained grayish black blood and partially-formed dark-red clots; the left ventricle contained bright-red fluid blood and a small clot. The lungs did not readily assume the congested appearance usually noticed after death from prussic acid intoxication or asphyxia; and it was only after handling and squeezing of the lung tissue that the static congestion occurred, and then only slightly.

Exp. III.—Experiment with artificial respiration after cyanic intoxication, on a small dog.—Tracheotomy performed under ether and a tube in trachea connected with apparatus for artificial respiration. Ether removed, and on appearance of consciousness, hydrocyanic acid dil. (U. S.) ℥ss subcutaneously injected in outside of thigh. Poisonous symptoms appearing in the course of a minute, artificial respiration was instituted, and maintained (20 inspirations and expirations a minute) for half an hour. During this time only three slight convulsions were observed, and the death occurred gradually and without any struggle. There was no dilatation of the pupils and no protrusion of the eye-balls. The heart continued its pulsations, gradually growing feebler and more rapid for twenty-five minutes, when it could not longer be perceived. The thorax was then opened, exposing the thoracic viscera. The right auricle was slowly contracting and dilating; each lobe of the lungs expanded and contracted in correspondence with the stroke of the machine for preserving artificial respiration. As the lungs became inflated, they acquired a bright roseate hue,* and on being exhausted became pale and exsanguine. No ecchymotic spot anywhere to be seen on the surface of the lungs. The blood from the arteries cut during the exposé of the thoracic viscera, was bright arterial red, that from the veins was venous and dark red. The ventricles of the heart were flaccid and full of blood. This condition of the viscera continued so long as the artificial respiration was maintained. The ventricles of the heart were opened, the right being filled with dark and the left with bright blood. Immediately following the cessation of artificial respiration, ecchymotic spots became noticeable on the surface of the lung tissue, and gradually extended, until in less than a minute the peculiar ecchymosis of the lungs observed in animals dying asphyxiated was evident, though not as marked as when artificial respiration had not been used. The right auricle had ceased its pulsations about the time of the cessation of the artificial respiration.

* The arteries expelled their blood on exhaustion of lungs, and became filled on inflation.

No muscular rigidity occurred during the six hours succeeding the death.

In this experiment artificial respiration was not continued after cessation of cardiac pulsations.

SUMMARY.—From these experiments, viewed in the way they have been brought to notice, it would seem as if we could derive the following summary of the pathological action of prussic acid:

Artificial respiration does not prevent the intoxication of prussic acid, nor does it materially assist in the elimination of the poison. Consequently means directed to the institution of artificial respiration are unnecessary to the protection of life.

Artificial respiration will prevent the convulsions of muscular spasms which follow the absorption of this poison in a dose dangerous to life.

Muscular irritability and the conductibility of nerves are not prevented by the intoxication of this drug, when artificial respiration has been maintained until after the cessation of cardiac pulsations.

The static congestion of the pulmonary tissue is either a post-mortem symptom or is due to the asphyxia noticed as one of the causes of death produced by this poison.

The cause of death by this agent is something beside asphyxia, and it is suggested that the fundamental cause of death is due to blood poisoning, whether by altering the physical or chemical condition of the blood it is not my purpose to state.

The apoplexy in the encephalon and spinal cord noticed by Tardieu,* as an anatomical lesion due to the intoxication of this agent, is probably referable to the asphyxia, secondarily induced, and not to the direct action of this poison. The same condition has been observed in animals dying from asphyxia produced by other causes,† from nitrous oxide and from chloroform. When asphyxia is not produced by prussic acid, no very serious apoplexy or congestion is noticed in autopsies.

It is generally supposed by toxicologists that rigor mortis ensues very soon after death from hydrocyanic intoxication, viz., within two or three hours; whereas in these two or three experiments, *rigor mortis* did not take place for several hours after death. Brown-Séquard and Stannius, independently of each other, the former at Paris, the latter at Rostock, discovered that in the living animal *muscular rigidity*, similar in every particular with *rigor mortis*, could be induced in the lower portion of the body in two or three hours after arterial blood had been shut off from that portion of the body. These two experimenters both considered that rigor mortis ensued as the final vital action of muscular contractility. They found that the supplying of the muscles in their state of rigidity with oxygenated blood would again relax the spasm, which relaxation would continue so long as this artificial supply was kept up, even though the temperature of the injected blood was 20°F. below the normal temperature of the living animal. In men killed suddenly by an accident, such as a bullet wound in the brain, after a period of active muscular exercise, rigor mortis ensues in a remarkable short time after death. In those who die from a lingering or exhausting disease, such as phthisis, rigor mortis does not set in very soon after death.

In men and animals, previously in good health, suddenly killed by a poisonous dose of strychnia and prussic acid, rigor mortis sets in quite speedily after the cessation of life. May it not be that a carbonization of the blood, and an engorgement of the vascular system with deoxydized blood, predisposes to the early appearance after death of rigor mortis?

In my experiments there was little, and in one case no tendency to convulsions previous to death, and death was not preceded by muscular spasms. Was this not due to the continuation of artificial respiration until the cessation of cardiac pulsations?

In answer to Dr. White, Dr. Amory stated that he had experimented some forty to fifty times with this drug, and where artificial respiration was not employed, muscular spasms had always preceded death.

Termination of the Optic Nerve Fibres.—Dr. Jeffries then gave, by means of enlarged illustrations and diagrams, an account of the present knowledge of the termination of the optic nerve fibres in the retina of men and animals as interpreted by Max Schultze. Dr. Bowditch asked if the rods and cones were possessed of distinct functions.

Dr. Jeffries thought that the cones were concerned in causing the perception of color, the rods, however, not.

Supposed Identity of Vegetable Parasites.—Dr. White read a paper upon the supposed identity of vegetable parasites and their relation to common moles, and showed under the microscope a specimen of the result of favus spores implanted upon his his own arm according to Peyritch's meth-

* Etude Medico-legale et Clinique sur l'empoisonnement, p. 1036. J. B. Bailliere, Paris, 1867.

† Tardieu Etude Med. Leg. sur la Pendaison, pp. 260-307, &c.

od. At his request the secretary also showed his arm with several well-marked favus cups growing upon it, the products of spores similarly implanted. [See Third Annual Report of State Board of Health.]

Selected Papers.

ON THE USE OF BAVARIAN APPARATUS IN THE TREATMENT OF FRACTURES.

By A. H. Corley, M.D., F.R.C.S.I., &c.

Some months ago I introduced to the notice of the Medical Profession in this Kingdom a new method of treating fractures of the long bones. * * * An apparatus which enables us to dispense with the use of splints, which permits us to inspect daily, if necessary, the state of the fractured limb, and which allows the patient to escape the wearisome necessity of six or eight weeks unchanging "dorsal decubitus," must quickly, when properly understood, supersede for ordinary cases every other method of treatment.

The appliances are few and inexpensive. A yard of the cheapest flannel, a pound or so of plaster of Paris, a few large pins with their heads bent, and a piece of calico or common roller make the surgeon independent of the surgical-instrument maker. The flannel is cut into two rectangular pieces the length of the fractured bone, and broad enough to encircle the limb and to leave a margin. One is a little wider than the other. Placing the narrow one evenly over the other they are sewn together by longitudinal stitching down the mesial line. They now resemble two sheets of note paper stitched together at the fold, the outer a little larger than the inner.

Raising the fractured limb carefully the flannel is to be spread smoothly under it, taking care that the line of sewing corresponds to the posterior mesial line of the limb. The two ends of the inner sheet are now brought evenly over the limb and fastened together by means of the bent pins, leaving the two outer half sheets spread on the surface of the bed. By extension, counter-extension, and manipulation, exact coaptation is secured, and now the plaster, mixed to a proper consistence with water, is partly smeared and partly poured on. The two outer sheets of flannel are rapidly brought over the surface of the plaster (which is now caught on both sides between the inner and outer layers) and are held together at their margins till the plaster sets, taking care that the extension and counter-extension are kept steadily up during that period. The pins must now be taken out (and it is for this purpose that their heads are bent), the edges trimmed, a few turns of the roller being applied, and the entire operation, which does not occupy ten minutes, is finished. Muscular spasm at once ceases, the patient acquires the power of shifting his position, and a steady equable lateral pressure is secured, adapted exactly to the shape and inequalities of the limb.

Should it be necessary to maintain any peculiar position, as in the treatment of Pott's and Colles's fracture, the assistant holds the limb while the plaster is setting, and a firm, rigid case is at once secured, exercising uniform pressure, incapable of slipping, and maintaining the fractured ends in steady apposition. But the most important advantage connected with this apparatus is the facility with which it may be taken off. Most plaster and starch bandages are not only troublesome to apply, but so difficult to remove, that there is a strong natural tendency on the part of the surgeon to leave them on, and trust that the bones are uniting properly. I believe I am not the only surgeon who has seen, when the bandages are cut, certain peculiar angles and curves in the limb that Nature never intended to be there. Again, there are certain fractures, as compound ones, &c., in treating which we must keep a portion of the limb in such a way as to be readily examined. In the Bavarian apparatus, when the bandages are loosened, the two opposite sides can be separated, like the bent covers of a book, the line of stitching (which prevents the running together of the plaster) acting like the back or hinge of the book, and allowing the limb to be exposed or to be taken out if necessary. If the swelling, usually present at first, diminish very much, the anterior edges can be trimmed so as to allow tightening, or the whole case may be taken off and lined with cotton. I have used it *immediately* after accidents, and the only cases where I should defer its application are those of fracture from direct violence where there is such contusion that even the most equable pressure would be contra-indicated. I have used it with success in fractured femurs, tibia, fibula, humerus, radius, ulna, as well as with Pott's and Colles's fractures, and have seen it used equally successfully by my colleagues. It is, however, with special reference to its efficiency in the treatment of Pott's fracture, Colles's fracture,

and fracture of the shafts of the femur, that I now wish to speak. Everyone knows the difficulty of treating the first of these very common accidents. I have tried Dupuytren's splint applied with care by myself, and have had the pleasure in a day or two of finding the splint slipped round to the back of the limb, a circumstance highly calculated to allow the fracture (to use the time-honored witticism) to turn out remarkably well. I have used the same splint, placing the limb after its application in a box, and I have used the box alone, trusting to padding to keep the proper position. I have secured *tolerably* favorable results, but only by means of constant trouble, frequent readjustment, and exemplary patience. When the Bavarian apparatus is applied there is no further interference necessary, the patient can at once lie on his side and get up to sit in a chair in two or three days.

With Colles's fracture I have tried how the plaster apparatus would suit, and have every reason to be pleased with the result. In applying it in this fracture, I place a pad of cotton over the dorsal prominence, and hold the hand strongly adducted till the plaster is set. In the two cases of fractured femur which I have treated in the last six months I have secured such admirable results, and with such comfort to the patient, that I shall dwell at some length on the accessories to its successful use. I have always been under the impression that if in this fracture the ends of the bone could be got fairly into apposition and *kept together* by equable lateral pressure, there would not be the great necessity for extension and counter-extension now presumed to exist. The long splint, which enforces a constant recumbent attitude, and the use of a perineal band, has been felt to be such an imperfect mode of treatment, that dozens of modifications of it have been proposed, of which a few trials have convinced surgeons that the proper apparatus is still a desideratum. Counter-extension by the perineal band is particularly objectionable from its pressure, from the irritation or even ulceration so likely to be produced, especially in children, and from its tendency in fractures high up to increase the deformity.

With the plaster apparatus the necessary lateral pressure is produced, and the only requisite afterwards is some means by which slight extension and counter-extension can be kept up, less I believe for the purpose of producing any effect at the fracture than for preventing the motions of the patient's body (which I freely allow) from disturbing the position of the fractured ends. Having adjusted the apparatus, I apply two long strips of soap plaster to the opposite sides of the leg, uniting them in a loop below the foot; to this loop I fasten a cord, which passes over the foot-rail of the bed, and has a weight dependent. This is the extension. I then raise the lower end of the mattress so that the feet are considerably higher than the pelvis, and the body forms the counter-extension. After the second day, I found in both my cases that the patient could sit up to eat his dinner, &c., without increasing pain or disturbing his limb in the slightest degree.—*Medical Press and Circular.*

Medical and Surgical Journal.

Boston: Thursday, March 21, 1872.

CONVALESCENT HOMES.

The objection which is repeatedly urged against the public charities of our large cities, that they are grossly abused by those who receive their benefits so freely, has in it much of plausibility. There can be no doubt in the mind of any physician who has ever been connected with an institution for the dispensing of gratuitous medical counsel that the relative number of really deserving recipients is far short of that intended by the benevolent spirit in which such institutions were founded. It would be a curious study to follow the wanderings of certain knowing "charity patients" from one shrine of Hygeia to another in search of health and in the hope, doubtless, that "in the multitude of counsellors there is safety." This abuse of kindness does not surely show a tendency to diminish. It is the opprobrium of public charities in all cities, and it has taxed the ingenuity of those having such organizations in their charge to devise some method whereby the deserving poor should receive the good offices intended for them, to the exclusion of the vagrant cheats.

Meanwhile the state of things alluded to is used as an argument by many for the abolition of such extended gratuities; and, on the ground that the free dispensing of medical

charity works ill both as regards the patients, to compromise their independence, and for the medical profession to impair its dignity and to cheapen its service, it is urged that the agencies for the distribution of medical counsel should be curtailed and not extended. Yet we question if the wisest discrimination would not find it difficult to decide where to begin the reform, or which, for example, of the seventy institutions in this city—hospitals, homes, dispensaries, infirmaries and charitable associations—should be sacrificed as needless.

With a view to indicate one method in which the usefulness of the many institutions may be supplemented and confirmed (without, however, intending to favor their further multiplication on the plan of organization at present in vogue), and in the conviction that there is a real need in the direction to which we shall allude, we desire to say a word concerning convalescent homes or sanitaria. The subject is not a new one, for since 1840 the usefulness of the homes for convalescents has been practically and successfully tested in England; and at present very few of the cities and larger towns in that country are without such an establishment. How highly these institutions are esteemed, may be seen by the repeated allusion in the medical periodicals to their successful administration. In our own country, scarcely any attempt has been made toward founding such sanitaria. In this vicinity very little has been done either in the way of planning or execution. The Second Report of the State Board of Health contains a description of the English establishments and an emphatic appeal for their organization in Massachusetts. The Children's Hospital foundation embraces the prospective idea of a convalescent home in the country as a part of its scheme of usefulness. The only practical attempt, however, to carry the plan into operation in this city, so far as we know, is the case of St. Luke's Home in Florence Street, and the success of that undertaking, now in its second year, is reported as gratifying and encouraging.

The purpose and theoretical character of convalescent homes are sufficiently suggested in the name. They are supplementary to hospitals. The visiting staff of any large hospital need hardly be reminded of seasons when the crowded condition of the wards enforces the premature discharge of patients whose half-healed wounds or scarcely commencing convalescence must yield the ground for the admission of still more urgent cases; or of seasons of less urgency when cases of prolonged convalescence from acute disease await almost indefinitely the moment when the needy patient may safely resume work, to anticipate which moment and to send out the patient too ill to commence his work, though apparently too well to longer cumber a hospital ward and consume its larder, would be to induce a relapse of the disability. For such contingencies as these, the convalescent home affords relief. And not for these alone. Physicians in the cities almost daily meet with cases in their private practice which need not so much the administration of drugs, however wisely ordered, or the benefit of a hospital, however liberally bestowed; but restoration to health depends on removal from the city and on the abundant supply of pure, country air, and of fresh country food—elements furnished in no hospital and in but few homes in crowded centres. To the numerous middle class of the people, whose capital is health and whose livelihood depends on this capital well preserved, the privilege, in case of sickness, of such a change from the depressing confinement of poor city homes to the freedom and the free air of the country would be an inestimable boon, and hardly to be compared with any other means of restoration.

The prime essential of a convalescent home, therefore, we esteem to be its establishment beyond the crowded city limits. This condition being granted, other details will adapt themselves. The institution need not be founded on a basis of luxury, for the idea of a home is not essentially dependent on the wealth it represents. The buildings may be plain and inexpensive, the administration economical, the regulations liberal. The fundamental idea and purpose being kept in view, that such an institution is for convalescence—not a hospital, not a resort for incurables or for special diseases,

not a centre for malingering, but a temporary home for the deserving poor, who are too sick to work and too well to be bedridden—and other conditions readily suggest themselves for the practical and easy execution of such a scheme.

Such an institution is much needed for this city, and it is high time that the matter should be agitated. Its beneficence cannot be gainsaid; its feasibility is obvious in a community whose pride is in its progressive liberality.

Intemperance in Massachusetts.—Although the general character of the leading article in the present number of the Journal will doubtless appear to many of our readers as hardly consistent with the spirit and purpose of a strictly scientific periodical, and as savoring very much of studies and discussions of an extra-professional nature, we feel that the matured opinions of the author will be perused by physicians with interest, and as in no small degree compatible with true medical progress. 'At a time when, both in our own country and in England, the subject of intemperance is a topic of serious not to say enthusiastic consideration in its bearing on public welfare, the medical profession should not stand aloof from the matter, since upon it rests the responsibility of pointing out to what extent great social evils affect the public health. The profession in England has declared itself, and the declaration, already presented in our columns, has excited great discussion within and beyond the medical ranks. Apart from any political or social elements in the question of intemperance, its strictly medical bearings merit profound consideration, and any sincere attempt to solve, from a scientific point of view, a problem which has defied the efforts of philanthropists, politicians and law-makers so long, will, we are sure, attract the attention of our readers. Concerning the inherent merits of such attempts we leave it to the judgment of others to determine.

A new Medical Journal.—We are informed that it is proposed to issue shortly a new periodical at Washington, D. C., to be entitled "The Washington Medical Monthly." The Editors will be Drs. S. C. Busey and William Lee, whose recent treatment as Editors of the *National Medical Journal* at the hands of their publishers, we took occasion to notice in our last number. We wish for the new scheme the best success.

Female Students at Edinburgh.—The irrepressible Miss Jex Blake and the tormenting questions of policy or of justice or of both of which that lady may be deemed the representative, still continue to vex the Faculty of Edinburgh University. The persistence and imperturbable courage, and the tact withal, which have characterized the repeated attempts to gain the point at issue, and to gain it absolutely and with no time-serving compromises, must have won the admiration of those who have regarded the progress of medical events at Edinburgh in their relation to the woman question, of those, even, who would not own themselves favorable to the feminine side of the controversy. The latest phase of the struggle is the offer of the University to approve of the selection of certain extra-academical teachers under whose tuition Miss Blake and "the other ladies" may finish their medical education; but this arrangement "does not imply any right in women to obtain medical degrees and does not confer any such right."

The medical students (of masculine gender) do not like this and other concessions to the ladies, and recently they indulged in a "demonstration" expressive of their feelings. To the number of three or four hundred they marched in procession through the streets, taking the houses of the Professors on the route and cheering or hooting the occupants according to their known predilections on the woman question. Finally the students went to Miss Blake's house, and although they pulled the door-bell with much vigor, the lady did not deign to acknowledge their presence. The *Lancet* in commenting on the affair observes:—"Such conduct is simply disgraceful and must ere long prove disastrous to the Edinburgh School."

The ringleaders of the demonstration

were presently sought out and punished with expulsion and the imposition of a fine.

Removal of an Inverted Uterus with an Intra-mural Fibrous Tumor.—The *Med. and Surg. Reporter* for Dec. 2d ult. contains the report, by Dr. Thomas Hay, of Philadelphia, of a case presenting some remarkable elements in its history and treatment. The subject of the sketch was a married woman, 32 years old, and a primipara. The history of the labor and of its convalescence contained nothing noteworthy, save that parturition was somewhat tedious and was terminated by means of forceps. Twenty-one months after confinement, and five months after the weaning of the child, the patient was attacked with profuse flowing, the result of heavy lifting; the attack confined her to the bed for several days. Subsequently there was menorrhagia, and after a year of this the flowing became pretty constant, regardless of the menstrual periods, the hæmorrhage being at times quite alarming, and accompanied with acute forcing pains. At the end of a year and a half after the first flowing, the patient was seized with agonizing, labor-like pains, which continued twenty-four hours, till "something seemed suddenly to come away," and relief followed. The pain gradually disappeared, although the hæmorrhage continued in lessened amount, accompanied by a vaginal discharge of sanious pus. In consequence of all her sufferings, the patient became greatly reduced and almost exsanguinated.

Coming under Dr. Hay's care, the patient was found to be in a critical condition from the constitutional effects of her disorder. Examination discovered the vagina to be completely filled by a pear-shaped tumor, whose size prevented any satisfactory exploration of the parts without an anæsthetic. The tumor could be felt in the lower abdomen, and its mobility was easily determined. From above, a funnel-shaped opening was readily detected through the abdominal parietes. The neck of the tumor, high up in the vagina, was found to be nearly surrounded by the os uteri, and the sound introduced into the cervix penetrated to about half an inch. These data and the history of the case determined an inverted uterus.

After certain preliminary treatment, with a view to improve the general state of the patient, Dr. Hay operated for the removal of the tumor by ecrasement, the section being made just below the os, after considerable difficulty in adjusting the chain to the parts. The opening into the peritoneal cavity after the operation easily admitted the passage of four fingers. To guard against hæmorrhage after the abscission, a globular sponge, saturated with Monsel's solution, was passed up against and partly into the os; the parts contracted speedily, and after twenty-four hours the cervix scarcely admitted the index finger.

Convalescence was rapid and without any complications of consequence. After three weeks, the patient sat up in bed, and in the sixth week she was able to go up and down stairs and could walk or ride without fatigue. At regular periods, subsequently to the operation, corresponding to the catamenial epochs, there was an apparent attempt at menstruation, with a very small flow of blood, lasting twenty-four hours, and attended with uneasiness and pain in the back. The conjugal relations were fully restored.

The tumor weighed fifteen ounces, avoirdupois, and measured six and a half inches long and twelve inches in circumference. The cavity of the inverted uterus was two and a quarter inches deep. In the parietes of the fundus there had been developed an interstitial fibroid growth, whose covering of uterine tissue had become much attenuated from distension and pressure. This incidental growth greatly modified the pathological appearances as compared with those usually observed in inverted uterus, and served also to complicate the operation to a marked degree.

Malingering Extraordinary.—An instance of feigned disease which, as regards skill in simulation and successful execution, may be considered unique, has recently transpired in London and is reported at length in the *Lancet* for February 17th. The subject was a well-educated and intelligent man of 43. He usually assumed the

rôle of a physician, and generally gave a straightforward history of his case for the time being and of his social antecedents. On one occasion his reputed relationship to Dr. Marshall Hall passed unchallenged. He successfully duped eleven of the hospital surgeons and physicians in London, some of them men of eminence. His object in carrying out the deception was never discovered. He passed successively from one hospital to another, remaining sometimes till he was pronounced convalescent, at other times taking sudden leave when suspicion appeared to be aroused to a degree too unpleasant.

His success at simulating was confined to the graver nervous affections, a department of pathology one would think ill adapted to malingering. He was treated for tetanus, for hemiplegia, and for ingravescent apoplexy, and his imitations of symptoms were so perfect as to entirely blind his medical attendants. He learned at one hospital points in his disease to be improved upon at the next; his tongue was at one time protruded too straight to conform to the paralytic condition he otherwise presented so well; at the next stopping place the lingual deviation was correctly assumed. At one time he suffered from traumatic tetanus, but the surgeons could find no cicatrix about the scalp to recall the alleged fall of forty feet some years before; the next time he has tetanus there is a distinct scar. His temperature arose once to 102° Fah., as it should; it was some time subsequently discovered that he had slyly placed the thermometer bulb near the candle flame when it should have been in his axilla. His first attempts at opisthotonos were wanting in rigidity of the abdominal muscles; he profited by the suggestion, and at the next hospital his tetanus was attended with spasms which made his abdominal muscles "as hard as boards." Night or day, he never forgot to carry out the simulated symptoms. In one hospital he had tetanus for ten days, and although a carbuncle, *which he did not feign*, came on the back of the neck and was freely opened without an anæsthetic, the tetanic opisthotonos was not meantime neglected. Treatment did not discourage him, and the variety of therapeutics to which he was subjected was heroic and was heroically endured. Opium and morphia were administered by the stomach and the rectum and under the skin. Calabar bean, belladonna, bromide and iodide of potassium, chloroform and hydrate of chloral were given in enormous doses to control his paroxysms. Ice-bags and ether-spray to the spine were also duly tried. He was watched with at night by diligent students enthusiastic to study the natural progress of tetanus; he was made the subject of a clinical lecture on "arachnoid hæmorrhage" before a medical class; and the notes of his case in the hospital case-books were always voluminous as the urgency of his disease appeared to demand.

Perhaps the one thing which, with the patient himself, acted as an offset for the severe treatment to which he was subjected was the sympathy which his misfortunes always elicited. A medical man, attacked with such grave disease, generally without warning and in the street, and brought to the hospital in a helpless state, called forth special commiseration; he was given good quarters, usually a private ward, and good food and stimulants were not withheld. On one occasion, he was believed to be incurable; a solicitor was sent for, and the pseudo-doctor made his will, bequeathing a handsome sum to the assistant-physician and to the hospital; this thoughtfulness on his part resulted in special comforts from the hospital authorities, including the best of wines and of food.

The period of this arch impostor's performances extended over nearly four years, and under his successive aliases comprised such Hospitals as St. Bartholomew's, Middlesex and St George's.

The *Lancet* remarks editorially on this case: "How many hospital statistical tables he must have falsified in his time! What a God-send such a patient would prove to the man with a firm faith in some new theory of disease and bran-new remedy for its cure!"

The *British Medical Journal* gives the total number of students registered at the London hospitals during the present season as 1,468. New entries, 468.

Medical Miscellany.

MEDICAL HONORS.—As an appropriate acknowledgment of the devoted services of the physicians in attendance on the Prince of Wales during his recent attack of typhoid, Her Majesty, Queen Victoria, has made Sir William Jenner a K.C.B. (a distinction hitherto reserved for military or political services), and has conferred the baronetcy on Dr. Gull.

INCONTINENCE OF URINE IN CHILDREN.—Mr. Holmes Coote recommends for this intractable affection the administration of creasote in one-minim doses, three times daily, combined with assafœtida and rhubarb pill, of each two grains.

EXTRACTION OF CATARACT, IN A PATIENT NINETY-EIGHT YEARS OF AGE.—In the *Michigan University Medical Journal* for Jan., 1872, Dr. Eugene Smith, of Detroit, reports a case in which cataract was successfully removed by Graefe's peripheric linear method, the patient being in his ninety-ninth year. The operation was done without an anæsthetic.

THE FIRST NUMBER of the Catalogue, designed to aid physicians in Boston and vicinity in discriminating in the matter of credit, is upon our table. The merits of the work are obvious.

CONTAGION BY VOLATILE VIRULENT MATTER.—The Academy of Sciences of Paris heard (July 10th, 1871) a paper of M. Chauveau, of Lyons, the eminent veterinarian, describing experiments which prove that the fluid evaporated from virulent matter fails to convey diseases by inoculation, whilst the matter itself succeeds. M. Chauveau concludes that the contagious principles are not floating in the atmosphere in the shape of gas or vapor, but that they are always adherent to some solid matter which is taken up by the gastric mucous membrane. Contagion at a distance takes place in this manner. In the rinderpest, for instance, the conveyance of the disease is more frequent and more rapid in confined spaces than in the open air. One of the experiments is performed thus: virulent matter is poured into a capsule, which is placed on a piece of glass, and the whole covered with a transparent bell. Under the glass is a sand-bath, which promotes gentle evaporation. To facilitate condensation the bell is covered with cotton wool, on which ether is now and then dropped. Some fluid now fixes on the inner aspect of the bell, and is obtained by means of a pipette. The liquid is then inoculated, as also the actual virulent matter in the capsule. The effects with the latter are positive, and negative with the former.—*Lancet.*

W. PITT BRECHIN has been appointed Assistant Surgeon at the Mass. Eye and Ear Infirmary, to commence March 1, 1872.

COLD WATER FOR CHANCRES.—Dr. Hémard (in the *Memorabilien*) asserts that for twenty years he has used, and always with success, no other treatment for chancres and chancroids than thorough washing with a stream of cold water every three or four hours. Sometimes he medicates the water with a little chlorate of potash or carbolic acid. In a few days the ulcer changes its appearance, and then he covers it with a thick layer of collodion, and it heals rapidly. The water should be poured in a narrow stream with some force.—*Phil. Med. and Surg. Reporter.*

TO CORRESPONDENTS.—Communications accepted:—Prolonged use of Hypodermic Injections of Morphia.—The Roosevelt Hospital.

Dr. O'G.'s remittance received from abroad.

PAMPHLETS RECEIVED.—Note sur l'Emploi du Sulfate de Quinine comme Succédané du Seigle Ergoté, par M. le Docteur E. Bouqué, Membre Titulaire de la Société de Médecine de Gand.—An Address before the Waco Medical Association, by D. R. Wallace, A.M., M.D., Retiring President, and President of the State Medical Association of Texas. Pp. 16.

MARRIED,—In Cincinnati, Ohio, Dr. C. E. Brown-Séquard, of Paris, to Miss Maria R. Carlisle, of C.

DIED,—At Hanover, N. H., Dr. T. R. Crosby, Professor of Natural History in Dartmouth College.—At San Francisco, 15th inst., Dr. Jonathan Letterman, Medical Director of the Army of the Potomac during the greater part of the late war, late Surgeon-General on the staff of Gov. Haight, of California, and coroner of San Francisco.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending March 16, 1872.

Cities and Towns.	*No. of Deaths.*
Boston	127
Charlestown	12
Worcester	27
Lowell	19
Milford	6
Chelsea	2
Cambridge	14
Salem	16
Lawrence	13
Springfield	3
Lynn	17
Gloucester	7
Fitchburg	3
Newburyport	7
Somerville	5
Fall River	15
Haverhill	5
Holyoke	4
	302

Prevalent Diseases.	
Consumption	58
Pneumonia	49
Scarlet fever	11
Typhoid Fever	7
Croup	6

Eight deaths occurred from smallpox; four in Boston, three in Gloucester and one in Fitchburg.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 16th, 127. Males, 61; females, 66. Accident, 5—apoplexy, 2—inflammation of the bowels, 1—bronchitis, 5—congestion of the brain, 1—disease of the brain, 6—cerebro-spinal meningitis, 1—consumption, 18—convulsions, 2—croup, 1—cyanosis, 1—debility, 5—diarrhœa, 3—dropsy, 1—dropsy of the brain, 2—eczema, 1—erysipelas, 1—scarlet fever, 4—disease of the heart, 3—disease of the kidneys, 1—disease of the knee-joint, 1—disease of the liver, 4—congestion of the lungs, 5—inflammation of the lungs, 14—marasmus, 6—measles, 3—old age, 5—paralysis, 2—premature birth, 1—puerperal disease, 5—pyæmia, 1—rheumatism, 1—scrofula, 2—smallpox, 4—spine disease, 1—suicide, 1—tumor, 2—unknown, 4.

Under 5 years of age, 46—between 5 and 20 years, 14—between 20 and 40 years, 28—between 40 and 60 years, 17—above 60 years, 22. Born in the United States, 86—Ireland, 30—other places, 11.